OIPE

RAW SEQUENCE LISTING   DATE: 07/20/2001
PATENT APPLICATION: US/09/897,778   TIME: 14:08:00

Input Set : A:\455c16.app.txt
Output Set: N:\CRF3\07202001\I897778.raw

```
     4 <110> APPLICANT: Wang, Tongtong
     5         Marnerakis, Margarita
     6         Fanger, Gary R.
     7         Vedvick, Thomas S.
     8         Carter, Darrick
     9         Watanabe, Yoshihiro
    10         Henderson, Robert A.
    11         Peckham, David W.
    12         Fanger, Neil
    16 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
    17         AND DIAGNOSIS OF LUNG CANCER
    20 <130> FILE REFERENCE: 210121.455C16
C--> 22 <140> CURRENT APPLICATION NUMBER: US/09/897,778
    23 <141> CURRENT FILING DATE: 2001-06-28
    25 <160> NUMBER OF SEQ ID NOS: 467
    27 <170> SOFTWARE: FastSEQ for Windows Version 4.0
    29 <210> SEQ ID NO: 1
    30 <211> LENGTH: 315
    31 <212> TYPE: DNA
    32 <213> ORGANISM: Homo sapiens
    34 <220> FEATURE:
    35 <221> NAME/KEY: misc_feature
    36 <222> LOCATION: 236, 241
    37 <223> OTHER INFORMATION: n = A,T,C or G
    39 <400> SEQUENCE: 1
    40 gcagagacag actggtggtt gaacctggag gtgccaaaaa agccagctgc gggcccagga 60
    41 cagctgccgt gagactcccg atgtcacagg cagtctgtgt ggttacagcg cccctcagtg 120
    42 ttcatctcca gcagagacaa cggaggaggc tcccaccagg acggttctca ttatttatat 180
W--> 43 gttaatatgt ttgtaaactc atgtacagtt tttttggggg gggaagcaat gggaanggta 240
W--> 44 naaattacaa atagaatcat ttgctgtaat ccttaaatgg caaacggtca ggccacgtga 300
    45 aaaaaaaaaa aaaaa                                                   315
    47 <210> SEQ ID NO: 2
    48 <211> LENGTH: 380
    49 <212> TYPE: DNA
    50 <213> ORGANISM: Homo sapiens
    52 <400> SEQUENCE: 2
    53 atttaggctt aagattttgt ttacccttgt tactaaggag caaattagta ttaaagtata 60
    54 atatatataa acaaatacaa aaagttttga gtggttcagc ttttttattt ttttttaatgg 120
    55 cataactttt aacaacactg ctctgtaatg ggttgaactg tggtactcag actgagataa 180
    56 ctgaaatgag tggatgtata gtgttattgc ataattatcc cactatgaag caaagggact 240
    57 ggataaattc ccagtctaga ttattagcct ttgttaacca tcaagcacct agaagaagaa 300
    58 ttattggaaa ttttgtcctc tgtaactggc actttggggt gtgacttatc ttttgccttt 360
    59 gtaaaaaaaa aaaaaaaaa                                               380
    61 <210> SEQ ID NO: 3
    62 <211> LENGTH: 346
    63 <212> TYPE: DNA
    64 <213> ORGANISM: Homo sapiens
```

RAW SEQUENCE LISTING   DATE: 07/20/2001
PATENT APPLICATION: US/09/897,778   TIME: 14:08:00

Input Set : A:\455c16.app.txt
Output Set: N:\CRF3\07202001\I897778.raw

```
 66 <220> FEATURE:
 67 <221> NAME/KEY: misc_feature
 68 <222> LOCATION: 316, 317, 318, 322, 323, 326, 329, 330, 331, 336, 337, 339,
 69      340, 342, 343
 70 <223> OTHER INFORMATION: n = A,T,C or G
 72 <400> SEQUENCE: 3
 73 ttgtaagtat acaattttag aaaggattaa atgttattga tcattttact gaatactgca 60
 74 catcctcacc atacaccatc cactttccaa taacatttaa tcctttctaa aattgtaagt 120
 75 atacaattgt actttctttg gattttcata acaaatatac catagactgt taattttatt 180
 76 gaagtttcct taatggaatg agtcattttt gtcttgtgct tttgaggtta cctttgcttt 240
 77 gacttccaac aatttgatca tatagtgttg agctgtggaa atctttaagt ttattctata 300
W--> 78 gcaataattt ctattnnnag annccnggnn naaaannann annaaa      346
 80 <210> SEQ ID NO: 4
 81 <211> LENGTH: 372
 82 <212> TYPE: DNA
 83 <213> ORGANISM: Homo sapiens
 85 <220> FEATURE:
 86 <221> NAME/KEY: misc_feature
 87 <222> LOCATION: 297, 306, 332
 88 <223> OTHER INFORMATION: n = A,T,C or G
 90 <400> SEQUENCE: 4
 91 actagtctca ttactccaga attatgctct tgtacctgtg tggctgggtt tcttagtcgt 60
 92 tggtttggtt tggttttttg aactggtatg tagggtggtt cacagttcta atgtaagcac 120
 93 tctcttctcc aagttgtgct ttgtggggac aatcattctt tgaacattag agaggaaggc 180
 94 agttcaagct gttgaaaaga ctattgctta tttttgtttt taaagaccta cttgacgtca 240
W--> 95 tgtggacagt gcacgtgcct tacgctacat cttgtttttct aggaagaagg ggatgcnggg 300
W--> 96 aaggantggg tgctttgtga tggataaaac gnctaaataa cacacctta catttgaaa 360
 97 aaaacaaaac aa                                              372
 99 <210> SEQ ID NO: 5
100 <211> LENGTH: 698
101 <212> TYPE: DNA
102 <213> ORGANISM: Homo sapiens
104 <220> FEATURE:
105 <221> NAME/KEY: misc_feature
106 <222> LOCATION: 8, 345, 422, 430, 433, 436, 438, 472, 481, 486, 515, 521,
107      536, 549, 553, 556, 557, 559, 568, 593, 597, 605, 611, 613,
108      616, 618, 620, 628, 630, 632, 634, 635, 639, 643, 647, 648,
109      649, 652, 654, 658, 664, 690
110 <223> OTHER INFORMATION: n = A,T,C or G
112 <400> SEQUENCE: 5
W--> 113 actagtanga tagaaacact gtgtcccgag agtaaggaga gaagctacta ttgattagag 60
114 cctaacccag gttaactgca agaagaggcg ggatactttc agctttccat gtaactgtat 120
115 gcataaagcc aatgtagtcc agtttctaag atcatgttcc aagctaactg aatcccactt 180
116 caatacacac tcatgaactc ctgatggaac aataacaggc ccaagcctgt ggtatgatgt 240
117 gcacacttgc tagactcaga aaaaatacta ctctcataaa tgggtgggag tattttgggt 300
W--> 118 gacaacctac tttgcttggc tgagtgaagg aatgatattc atatnttcat ttattccatg 360
119 gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
W--> 120 tntccaaatn ttngtncngt cgctgcacat atctgaaatc ctatattaag antttcccaa 480
W--> 121 natgangtcc ctggtttttc cacgccactt gatcngtcaa ngatctcacc tctgtntgtc 540
```

Input Set : A:\455c16.app.txt
Output Set: N:\CRF3\07202001\I897778.raw

```
W--> 122 ctaaaaccnt ctnctnnang gttagacngg acctctcttc tcccttcccg aanaatnaag 600
W--> 123 tgtgngaaga nanccncncn cccccctncn tncnncctng ccngctnnnc cncntgtngg 660
W--> 124 gggngccgcc cccgcggggg gacccccccn ttttcccc              698
     126 <210> SEQ ID NO: 6
     127 <211> LENGTH: 740
     128 <212> TYPE: DNA
     129 <213> ORGANISM: Homo sapiens
     131 <220> FEATURE:
     132 <221> NAME/KEY: misc_feature
     133 <222> LOCATION: 82, 406, 426, 434, 462, 536, 551, 558, 563, 567, 582, 584,
     134       592, 638, 651, 660, 664, 673, 675, 697, 706, 711, 715, 716,
     135       717, 723, 724, 725, 733
     136 <223> OTHER INFORMATION: n = A,T,C or G
     138 <400> SEQUENCE: 6
     139 actagtcaaa aatgctaaaa taatttggga gaaaatattt tttaagtagt gttatagttt 60
W--> 140 catgtttatc ttttattatg tnttgtgaag ttgtgtcttt tcactaatta cctatactat 120
     141 gccaatattt ccttatatct atccataaca tttatactac atttgtaaga gaatatgcac 180
     142 gtgaaactta acactttata aggtaaaaat gaggtttcca agatttaata atctgatcaa 240
     143 gttcttgtta tttccaaata gaatggactt ggtctgttaa ggggctaagg gagaagaaga 300
     144 agataaggtt aaaagttgtt aatgaccaaa cattctaaaa gaaatgcaaa aaaaaattta 360
W--> 145 ttttcaagcc ttcgaactat ttaaggaaag caaaatcatt tcctanatgc atatcatttg 420
W--> 146 tgagantttc tcantaatat cctgaatcat tcatttcagc tnaggcttca tgttgactcg 480
W--> 147 atatgtcatc tagggaaagt ctatttcatg gtccaaacct gttgccatag ttggtnaggc 540
W--> 148 tttcctttaa ntgtgaanta ttnacangaa attttctctt tnanagttct tnatagggtt 600
W--> 149 aggggtgtgg gaaaagcttc taacaatctg tagtgttncg tgttatctgt ncagaaccan 660
W--> 150 aatnacggat cgnangaagg actgggtcta tttacangaa cgaatnatct ngttnnntgt 720
W--> 151 gtnnncaact ccngggagcc                                   740
     153 <210> SEQ ID NO: 7
     154 <211> LENGTH: 670
     155 <212> TYPE: DNA
     156 <213> ORGANISM: Homo sapiens
     158 <220> FEATURE:
     159 <221> NAME/KEY: misc_feature
     160 <222> LOCATION: 265, 268, 457, 470, 485, 546, 553, 566, 590, 596, 613, 624,
     161       639, 653, 659, 661
     162 <223> OTHER INFORMATION: n = A,T,C or G
     164 <400> SEQUENCE: 7
     165 gctggggagc tcggcatggc ggtccccgct gcagccatgg ggccctcggc gttgggccag 60
     166 agcggccccg gctcgatggc cccgtggtgc tcagtgagca gcggcccgtc gcgctacgtg 120
     167 cttgggatgc aggagctgtt ccggggccac agcaagaccg cgagttcctg gcgcacagcg 180
     168 ccaaggtgca ctcggtggcc tggagttgcg acgggcgtcg cctacctcgg ggtcttcgac 240
W--> 169 aagacgccac gtcttcttgc tggananga ccgttggtca aagaaaacaa ttatcgggga 300
     170 catgggata gtgtggacca ctttgttggc atccaagtaa tcctgaccta tttgttacgg 360
     171 cgtctggaga taaaaccatt cgcatctggg atgtgaggac tacaaaatgc attgccactg 420
W--> 172 tgaacactaa aggggagaac attaatatct gctggantcc tgatgggcan accattgctg 480
W--> 173 tagcnacaag gatgatgtgg tgactttatt gatgccaaga aaccccgttc caaagcaaaa 540
W--> 174 aaacanttcc aanttcgaag tcaccnaaat ctcctggaac aatgaacatn aatatnttct 600
W--> 175 tcctgacaat ggnccttggg tgtntcacat cctcagctnc cccaaaactg aanncctgtnc 660
W--> 176 natccacccc                                              670
```

RAW SEQUENCE LISTING   DATE: 07/20/2001
PATENT APPLICATION: US/09/897,778   TIME: 14:08:00

Input Set : A:\455c16.app.txt
Output Set: N:\CRF3\07202001\I897778.raw

```
     178 <210> SEQ ID NO: 8
     179 <211> LENGTH: 689
     180 <212> TYPE: DNA
     181 <213> ORGANISM: Homo sapiens
     183 <220> FEATURE:
     184 <221> NAME/KEY: misc_feature
     185 <222> LOCATION: 253, 335, 410, 428, 448, 458, 466, 479, 480, 482, 483, 485,
     186        488, 491, 492, 495, 499, 500, 502, 503, 512, 516, 524, 525,
     187        526, 527, 530, 540, 546, 550, 581, 593, 594, 601, 606, 609,
     188        610, 620, 621, 622, 628, 641, 646, 656, 673
     189 <223> OTHER INFORMATION: n = A,T,C or G
     191 <400> SEQUENCE: 8
     192 actagtatct aggaatgaac agtaaaagag gagcagttgg ctacttgatt acaacagagt 60
     193 aaatgaagta ctggatttgg gaaaacctgg ttttattaga acatatggaa tgaaagccta 120
     194 cacctagcat tgcctactta gccccctgaa ttaacagagc ccaattgaga caaacccctg 180
     195 gcaacaggaa attcaaggga gaaaaagtaa gcaacttggg ctaggatgag ctgactccct 240
W--> 196 tagagcaaag ganagacagc ccccattacc aaataccatt tttgcctggg gcttgtgcag 300
W--> 197 ctggcagtgt tcctgcccca gcatggcacc ttatngtttt gatagcaact tcgttgaatt 360
W--> 198 ttcaccaact tattacttga aattataata tagcctgtcc gtttgctgtn tccaggctgt 420
W--> 199 gatatatntt cctagtggtt tgactttnaa aataaatnag gtttantttt ctcccccnn 480
W--> 200 cnntnctncc nntcnctcnn cnntcccccc cnctcngtcc tccnnnnttn gggggggccn 540
W--> 201 ccccncggn ggaccccct ttggtcctt agtggaggtt natggcccct ggnnttatcc 600
W--> 202 nggccntann tttcccgtn nnaaatgntt ccccctccca ntcccnccac ctcaanccgg 660
W--> 203 aagcctaagt ttntaccctg ggggtcccc 689
     205 <210> SEQ ID NO: 9
     206 <211> LENGTH: 674
     207 <212> TYPE: DNA
     208 <213> ORGANISM: Homo sapiens
     210 <220> FEATURE:
     211 <221> NAME/KEY: misc_feature
     212 <222> LOCATION: 602, 632, 639, 668
     213 <223> OTHER INFORMATION: n = A,T,C or G
     215 <400> SEQUENCE: 9
     216 gtccactctc ctttgagtgt actgtcttac tgtgcactct gttttcaac tttctagata 60
     217 taaaaaatgc ttgttctata gtggagtaag agctcacaca cccaaggcag caagataact 120
     218 gaaaaaagcg aggctttttt gccaccttgg taaaggccag ttcactgcta tagaactgct 180
     219 ataagcctga agggaagtag ctatgagact ttccattttt cttagttctc ccaataggct 240
     220 ccttcatgga aaaaggcttc ctgtaataat tttcacctaa tgaattagca gtgtgattat 300
     221 ttctgaaata agagacaaat tgggccgcag agtcttcctg tgatttaaaa taaacaaccc 360
     222 aaagttttgt ttggtcttca ccaaaggaca tactctaggg ggtatgttgt tgaagacatt 420
     223 caaaaacatt agctgttctg tctttcaatt tcaagttatt ttggagactg cctccatgtg 480
     224 agttaattac tttgctctgg aactagcatt attgtcatta tcatcacatt ctgtcatcat 540
     225 catctgaata atattgtgga tttccccctc tgcttgcatc ttcttttgac tcctctggga 600
W--> 226 anaaatgtca aaaaaaaagg tcgatctact cngcaaggnc catctaatca ctgcgctgga 660
W--> 227 aggacccnct gccc 674
     229 <210> SEQ ID NO: 10
     230 <211> LENGTH: 346
     231 <212> TYPE: DNA
     232 <213> ORGANISM: Homo sapiens
```

RAW SEQUENCE LISTING   DATE: 07/20/2001
PATENT APPLICATION: US/09/897,778   TIME: 14:08:00

Input Set : A:\455c16.app.txt
Output Set: N:\CRF3\07202001\I897778.raw

```
234 <220> FEATURE:
235 <221> NAME/KEY: misc_feature
236 <222> LOCATION: 320, 321, 322, 325, 326, 328, 329, 330, 332, 333, 334, 335,
237      342
238 <223> OTHER INFORMATION: n = A,T,C or G
240 <400> SEQUENCE: 10
241 actagtctgc tgatagaaag cactatacat cctattgttt ctttctttcc aaaatcagcc 60
242 ttctgtctgt aacaaaaatg tactttatag agatggagga aaaggtctaa tactacatag 120
243 ccttaagtgt ttctgtcatt gttcaagtgt attttctgta acagaaacat atttggaatg 180
244 tttttctttt ccccttataa attgtaattc ctgaaatact gctgctttaa aaagtcccac 240
245 tgtcagatta tattatctaa caattgaata ttgtaaatat acttgtctta cctctcaata 300
W--> 246 aaagggtact tttctattan nnagnngnnn gnnnnataaa anaaaa 346
248 <210> SEQ ID NO: 11
249 <211> LENGTH: 602
250 <212> TYPE: DNA
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 11
254 actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
255 gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgttagatta atgtatttgt 120
256 tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaattctta 180
257 ttcaattcca tgacttaagg ttggagagct aaacactggg attttttggat aacagactga 240
258 cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
259 atctgcactt tctaaatatc aaaaaaggga aatgaagtta taaatcaatt tttgtataat 360
260 ctgtttgaaa catgagtttt atttgcttaa tattagggct ttgccccttt tctgtaagtc 420
261 tcttgggatc ctgtgtagaa ctgttctcat taaacaccaa acagttaagt ccattctctg 480
262 gtactagcta caaattcggt ttcatattct acttaacaat ttaaataaac tgaaatattt 540
263 ctagatggtc tacttctgtt catataaaaa caaaacttga tttccaaaaa aaaaaaaaaa 600
264 aa 602
266 <210> SEQ ID NO: 12
267 <211> LENGTH: 685
268 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
271 <220> FEATURE:
272 <221> NAME/KEY: misc_feature
273 <222> LOCATION: 170, 279, 318, 321, 322, 422, 450, 453, 459, 467, 468, 470,
274      473, 475, 482, 485, 486, 491, 498, 503, 506, 509, 522, 526,
275      527, 528, 538, 542, 544, 551, 567, 568, 569, 574, 576, 582,
276      587, 588, 589, 590, 592, 593, 598, 599, 603, 605, 608
277 <223> OTHER INFORMATION: n = A,T,C or G
279 <221> NAME/KEY: misc_feature
280 <222> LOCATION: 633, 634, 635, 644, 646, 648, 651, 655, 660, 662, 663, 672,
281      674, 675, 682, 683
282 <223> OTHER INFORMATION: n = A,T,C or G
284 <400> SEQUENCE: 12
285 actagtcctg tgaaagtaca actgaaggca gaaagtgtta ggattttgca tctaatgttc 60
286 attatcatgg tattgatgga cctaagaaaa taaaaattag actaagcccc caaataagct 120
W--> 287 gcatgcattt gtaacatgat tagtagattt gaatatatag atgtagtatn ttgggtatct 180
288 aggtgtttta tcattatgta aaggaattaa agtaaaggac tttgtagttg tttttattaa 240
W--> 289 atatgcatat agtagagtgc aaaaatatag caaaaatana aactaaaggt agaaaagcat 300
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/897,778

DATE: 07/20/2001
TIME: 14:08:01

Input Set : **A:\455c16.app.txt**
Output Set: **N:\CRF3\07202001\I897778.raw**

```
L:22 M:270 C: Current Application Number differs, Wrong Format
L:43 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:246 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
```

VERIFICATION SUMMARY   DATE: 07/20/2001
PATENT APPLICATION: US/09/897,778   TIME: 14:08:01

Input Set : **A:\455c16.app.txt**
Output Set: **N:\CRF3\07202001\I897778.raw**

```
L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:321 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
```